

PATENT CLAIMS

1. An arrangement for using bioactive or
5 osteoinductive material to build up a bone-based
lateral support (18, 18') for at least one implant
(6) arranged in an assigned jaw bone hole (2c) in
preferably defectively or irregularly extending
10 jaw bone (2) and where the implant is arranged so
that it can be completely or partially covered by
soft tissue, with or without the periosteum of the
jaw bone, or by a unit applied to the jaw bone,
for example a metal-based or polymeric, stiff
15 membrane, and where the implant, when completely
or partially covered, forms one or more spaces
together with the soft tissue and the possible
periosteum and/or the unit and the upper or
lateral surface(s) of the jaw bone in question,
and cell-containing body fluid penetrates into
20 this space or these spaces from at least said jaw
bone, characterized in that the bioactive or
osteoinductive material consists of matrix
molecules, growth factors and differentiation
factors and/or peptides with growth-stimulating
25 properties, etc., here called GSS, arranged in or
on the implant, preferably on one or more outer
side surfaces or one or more outer thread parts
which in an initial stage is/are exposed from the
jaw bone, which GSS, in a stage of incorporation
30 following the initial stage, passes into each
closed space and interacts or integrates with said
cells and thus forms the bone-based lateral
support for the implant.
- 35 2. The arrangement as claimed in patent claim 1,
characterized in that the jaw bone hole (2c) and
thus the implant (6) have a position which is
offset in relation to the real center line of the

5 jaw bone in the horizontal plane, so that the implant in said initial stage has first side surface parts or outer thread parts which have a greater degree of exposure than other side surface parts or outer thread parts, and after the stage of incorporation the bone-based lateral support is intended to give the first side surface parts or outer thread parts an increased degree of bone coverage or increased degrees of bone coverage.

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3. The arrangement as claimed in patent claim 1 or 2, characterized in that two or more implants which are arranged along the horizontal extent of the jaw bone in assigned jaw bone holes are arranged in conjunction with defects or irregularities in depth and/or the lateral direction(s), and in that, in the stage of incorporation, they substantially fill the jaw bone defects and irregularities and give the implant substantially the same degree of recessing after the stage of incorporation.

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4. The arrangement as claimed in patent claim 1, 2 or 3, characterized in that, in the case of a jaw bone greatly degenerated in the vertical direction, all the implants are given bone-based lateral supports extending substantially identically in the vertical direction.

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30 5. The arrangement as claimed in patent claim 1, 2, 3 or 4, characterized in that first portions (6a) of each implant with a greater degree of exposure than other portions (6b) of the implant or implants are covered with GSS with a greater or lesser degree of concentration of GSS than the other portions.

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6. The arrangement as claimed in any of patent claims 1-5, characterized in that the unit (19) can be temporarily or permanently attached to the jaw bone, the unit, when temporarily attached, being applied during the initial and incorporation stages.
7. The arrangement as claimed in patent claim 1 or 6, characterized in that the unit has an internally curved surface (19a) which, when the unit is applied, is directed toward the side surface (6a) or outer thread part of the respective implant (6).
8. The arrangement as claimed in patent claim 1, 6 or 7, characterized in that the unit has an upper part (19b) which completely or partially extends over the implant's upper or outer surface (6d').
9. The arrangement as claimed in any of patent claims 1-8, characterized in that, at its surface covered by the wall of the jaw hole (2c), the implant works with body fluid accumulation in the layer or the gap (15) between the implant and the wall (2c).
10. The arrangement as claimed in any of patent claims 1-9, characterized in that the implant's outer surface (6a) exposed in the initial stage extends between 20-180°, preferably 30-120°, viewed in the circumferential direction of the implant.
11. The arrangement as claimed in any of patent claims 1-10, characterized in that the implant's outer surface exposed in the initial stage extends 20-80%, preferably 30-70%, viewed in the height direction (H).

12. The arrangement as claimed in patent claim 1, 6, 7 or 8, characterized in that the unit is coated with GSS on its outer surface (6a) exposed toward the implant in the initial stage.